



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,996	11/14/2001	Bernd Halbrock	65857-0037	8824

10291 7590 03/18/2004

RADER, FISHMAN & GRAUER PLLC  
39533 WOODWARD AVENUE  
SUITE 140  
BLOOMFIELD HILLS, MI 48304-0610

EXAMINER

DUNWOODY, AARON M

ART UNIT	PAPER NUMBER
----------	--------------

3679

DATE MAILED: 03/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/993,996

Applicant(s)

HALBROCK ET AL.

Examiner

Aaron M Dunwoody

Art Unit

3679

ML

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1, 15 and 24-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 15 and 24-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Drawings*

The drawings were received on 1/2/2004. These drawings are approved.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 15 and 24-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent 5513882, Lewis in view of US patent 1019000, Watson.

In regards to claim 1, Lewis discloses a quick-connect device for connecting fluid lines comprising a first connecting element (13) that includes an annular planar first support surface (16), an inclined surface, and an annular receptacle space (BB in Figure 3C below) with a first sealing surface and a second sealing surface (inside of the groove holding seal 14), an annular sealing element (14) that is arranged in the receptacle space and adapted (capable) to contact the first and second sealing surfaces, a second connecting element (10) that includes an annular flange that has a third sealing surface (SS) and an annular second planar support surface (12) adapted (capable) to contact the first annular support surface, and a clamping device (18), wherein the third sealing surface is adapted to contact the annular sealing element.



device that includes a clamping wedge having a locking device, two parallel clamp openings formed by wedged grooves. Watson teaches a wedge-clamping device (9) that includes a clamping wedge having a locking device, two parallel clamp openings formed by wedged grooves (3) “to provide a simple hose [pipe] coupling that can be coupled and uncoupled with great convenience” (page 1, lines 8-13). As Watson is designed to simplify the operation applying and removing a clamping wedge, it would have been obvious to one having ordinary skill in the art at the time the invention was made to fabricate a wedge-clamping device including a clamping wedge having a locking device, and two parallel clamp openings formed by wedged grooves to provide a simple pipe coupling that can be coupled and uncoupled with great convenience, as taught by Watson.

In regards to claim 15, Lewis discloses the annular sealing element being an O-ring.

In regards to claim 24, Lewis discloses the clamping wedge being made of plastic

Art Unit: 3679

In regards to claim 25, Watson discloses each clamping opening being associated with a clamping wedge and the two clamping wedges being connected by a crosspiece.

In regards to claim 26, Lewis discloses a support device (GG see Figure 3C above).

In regards to claim 27, Lewis discloses the first annular support surface including a support device being that extends from the remainder of the first annular support surface that contacts the second annular support surface.

In regards to claim 28, Lewis in view of Watson discloses a quick-connect device for connecting fluid lines comprising:

- a first connecting element that includes an annular first support surface, an inclined surface, and an annular receptacle space with a first sealing surface and a second sealing surface,

- an annular sealing element that is arranged in the receptacle space and adapted (capable) to contact the first and second sealing surfaces,

- a second connecting element that includes a third sealing surface and an annular second support surface adapted (capable) to contact the first annular support surface, and a wedge-clamping device that includes two clamping wedge adapted (capable) to contact the inclined surface of the first connecting element and includes two clamp openings adapted (capable) to have the clamping wedges inserted therein, wherein the two clamping wedges are connected by a crosspiece and lockingly engage the first connecting element.

In regards to claim 29, Lewis in view of Watson discloses a quick-connect device for connecting fluid lines comprising:

a first connecting element that includes an annular first support surface, an inclined surface, and an annular receptacle space with a first sealing surface and a second sealing surface,

an annular sealing element that is arranged in the receptacle space and adapted (capable) to contact the first and second sealing surfaces,

a second connecting element that includes a third planar sealing surface and an annular second support surface adapted (capable) to contact the first annular support surface,

a wedge-clamping device that includes a clamping wedge adapted (capable) to contact the inclined surface of the first connecting element and lockingly engage the first connecting element, and

a support device is adapted (capable) to be located between the first and the second annular support surfaces.

In regards to claim 30, Lewis in view of Watson discloses a quick-connect device for connecting fluid lines comprising:

a first connecting element having a receptacle space positioned about a central axis and a wedge receiving opening;

a seal disposed within the receptacle space and around the aperture;

Art Unit: 3679

a second connecting element having a flange, wherein the flange has a planar sealing face opposite a wedge face, wherein the second connecting element is adapted (capable) to abut the sealing face against the seal within the receptacle, and

a wedge-clamping device that has a first connecting element face and a flange face, wherein the first connecting element face is at a non-parallel angle with respect to the flange face;

wherein the wedge-clamping device is movably positioned in the wedge receiving opening and adapted (capable) to abut the flange face against the wedge face of the second connecting element;

wherein the wedge-clamping device is adapted (capable) to abut the first connecting element face against a first defining face of the wedge receiving opening in the first connecting element;

wherein movement of the wedge within the wedge receiving opening in a first direction presses the flange face against the wedge face and presses the first connecting element face against the defining face to cause the sealing face to press against the seal;

wherein the wedge lockingly engages the first connecting element.

In regards to claim 31, Watson discloses the wedge clamping device being adapted (capable) to move along a non-parallel direction with respect to the central axis.

In regards to claim 32, Watson discloses the movement of the wedge clamping device causing the sealing face to move in a direction parallel to the central axis.

Art Unit: 3679

In regards to claim 33, Lewis discloses a second defining face that defining a second face of the wedge receiving opening; wherein the first defining face is at a non-parallel angle with respect to the second defining face.

In regards to claim 34, Watson discloses the non-parallel angle between the first defining face and the second defining face being substantially the same as an angle between the first connecting element and the flange face.

### ***Response to Arguments***

Applicant's arguments with respect to claims Claims 1, 15 and 24-34 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.



Art Unit: 3679

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron M Dunwoody whose telephone number is (703) 306-3436. The examiner can normally be reached on Monday - Friday between 7:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H Browne can be reached on (703) 308-1159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

.amd



**Lynne H. Browne**  
**Supervisory Patent Examiner**  
**Technology Center 3670**